North Corridor LRT Houston, Texas

Final Design

(Based upon information received by FTA in August 2009)

Summary Description

Proposed Project: Light Rail Transit

5.2 Miles, 8 Stations

Total Capital Cost (\$YOE): \$756.00 Million (includes \$45.8 million in finance charges)

Section 5309 New Starts Share (\$YOE): \$450.00 Million (59.5%)

Annual Forecast Year Operating Cost: \$7.69 Million

Ridership Forecast (2030): 29,000 Average Weekday Boardings

7,500 Daily New Riders

Opening Year Ridership Forecast (2013): 17,400 Average Weekday Boardings

Overall Project Rating: Medium
Project Justification Rating: Medium
Local Financial Commitment Rating: Medium

Project Description: The Metropolitan Transit Authority of Harris County (METRO) is proposing to construct a light rail transit (LRT) line from the existing University of Houston-Downtown station in the Houston central business district (CBD) to the Northline Mall Transit Center. The LRT line would operate in semi-exclusive guideway with limited mixed traffic operations. The majority of the LRT line would operate at-grade (4.1 miles), an additional 0.86 miles would be elevated to avoid two freight railroads (the Southern Pacific Railroad and the Burlington-Northern Santa Fe Railway), and the remaining 0.3 miles would be in retained fill. The project includes the purchase of 24 light rail vehicles. Service would operate every six minutes during peak and off peak periods, including weekends, and would interline with the existing METRO Rail Red Line in the CBD. No parking spaces would be built as part of the project. The project would be the first operable segment of an LRT line that METRO plans to eventually extend to George Bush Intercontinental Airport.

Project Purpose: The corridor runs parallel to and immediately east of Interstate 45. Due to poor local roadway connectivity within the corridor, current bus service is subject to congested conditions and cannot provide reasonable travel time savings or serve the current and forecasted demand for transit. Compared to current local bus service, the LRT line would offer faster service to core activity centers and would provide a one-seat ride into the Houston CBD from the city's transit-dependent northern areas. The corridor links four academic institutions and a major retail development (Northline Mall). The two largest job markets in the Houston region – downtown Houston and the Texas Medical Center – draw large numbers of North Corridor residents.

Project Development History, Status and Next Steps: FTA approved the project into preliminary engineering in March 2008. FTA and METRO completed a supplemental Final Environmental Impact Statement in May 2008. FTA issued a Record of Decision in July 2008. The project was approved into final design in August 2009.

METRO will use an innovative project delivery method whereby a Facility Provider, comprised of a team of engineering, construction, construction management and vehicle manufacturing firms, will complete design, finalize the construction phasing approach, and expedite construction of several rapid transit lines throughout Houston. The Facility Provider will also be responsible for operation and maintenance of the proposed LRT line.

In September 2010, following an investigation of METRO's light rail vehicle (LRV) procurement plan, FTA found that METRO violated Federal Buy America and procurement rules and directed METRO to develop a new plan for LRV procurement. METRO is complying with FTA's directive and plans to provide FTA with an updated New Starts submission by March 2011. Thus, the rating described herein reflects conditions as of August 2009, when the project was approved into final design.

Locally Proposed Financial Plan			
Source of Funds	Total Funds (\$million)	Percent of Total	
Federal: Section 5309 New Starts	\$450.00	59.5%	
Local: METRO Dedicated Sales Tax	\$306.00	40.5%	
Total:	\$756.00	100.0%	

NOTE: The financial plan reflected in this table has been developed by the project sponsor and does not reflect a commitment by DOT or FTA. The sum of the figures may differ from the total as listed due to rounding.

TX Houston, North Corridor LRT FY2011 Financial Assessment Summary prepared November 2009

Factor	Rating	Comments
Local Financial Commitment Rating	Medium	
Non-Section 5309 New Starts Share (20% of summary financial rating)	Medium-High	The New Starts share of the project is 59.5 percent. Section 3043(h)(1) in SAFETEA-LU states, "for the purpose of calculating the non-Federal share of the net project cost of any new fixed guideway capital project currently included in the Advanced Transit Program ("Metro Solutions Plan") sponsored by the Metropolitan Transit Authority of Harris County, Texas, the Secretary shall include \$324,000,000 in State and local funds expended for the design and construction of the Red Line Light Rail Transit system that operates in Harris County, Texas." METRO has decided to apply \$162 million of its contribution to the Red Line as credit toward the North Corridor LRT project. Application of the credit allowed for in the legislative language lowers the New Starts share to approximately 49 percent. The credit increases the share rating from <i>Medium</i> to <i>Medium-High</i> .
Project Capital Financial Plan (50% of summary financial rating)	Medium	moreuses the share rating from freedom to freedom the
Capital Condition (25% of capital plan rating)	Medium-Low	The average age of METRO's bus fleet is 8.8 years, which is slightly older than the industry average. METRO has not issued debt. Therefore, no bond ratings have been published.
Commitment of Funds (25% of capital plan rating)	High	METRO's sales tax revenues, which are existing and committed, will cover the entire non-New Starts share of the North Corridor light rail transit project.
Capital Cost Estimates, Assumptions and Financial Capacity (50% of capital plan rating)	Medium	Assumptions on sales tax growth, inflation, and Federal funding are reasonable compared to historical experience. The capital cost estimate is reasonable.
Project Operating Financial Plan (30% of summary financial rating)	Medium	
Operating Condition (25% of operating plan rating)	Medium-Low	METRO's current ratio of assets to liabilities, as reported in its most recent audited financial statements, was just over 1.0 in financial year 2008. METRO's transit services have increased in the last five years.
Commitment of Funds (25% of operating plan rating)	High	Over 75 percent of operating funding, including fare revenues, sales tax revenues, operating grants, miscellaneous revenue (advertising and ID card fees), and interest income, is committed.

O&M Cost Estimates,	Medium-Low	Projections of growth in operating and maintenance costs and farebox revenues are
Assumptions, and Financial		optimistic compared to historical experience.
Capacity		The financial plan shows projected cash balances exceeding 25 percent of annual
(50% of operating plan rating)		operating costs.

North Corridor LRT

Houston, Texas

Final Design

(Land Use and Economic Development Rating based upon Information accepted by FTA November 2008)

LAND USE RATING: Medium-Low 1

Existing Land Use: Medium-Low (One-third of Land Use Rating)

The land use rating reflects the population and employment densities within ½-mile of proposed station areas.

- The North Corridor is characterized by low-density commercial, light industrial, and mixed residential development laid out on a grid pattern of streets. Auto-oriented commercial uses generally line the major roadways. Population densities are low to moderate, averaging 6,400 people per square mile.
- There are significant numbers of vacant parcels as well as underutilized properties. Pedestrian access
 is hindered by drainage ditches, wide streets, a lack of curb cuts, expansive parking lots, and a lack of
 sidewalks in many residential neighborhoods. A large mall is at the northern terminus while underused
 industrial buildings and an abandoned rail yard slated for redevelopment are at the southern end of the
 corridor.
- A total of 12,600 jobs are located in proximity to the proposed stations, while an estimated 130,000 jobs are directly served in the Houston CBD.

Transit-Supportive Plans and Policies: Medium-Low (One-third of Land Use Rating)

- Limited efforts have been made at regional planning and growth management. In 2005 the Houston-Galveston Area Council (H-GAC) joined with the citizen-led Blueprint Houston to undertake Envision Houston Region, an initiative designed to create a regional "vision" for the future growth of the area. The results informed the long-range transportation plan update, but have not led to further implementation activities to shape regional land use patterns.
- Some station area planning activities have been initiated. METRO is undertaking a Station Area Work
 Program to address barriers to station area development, tools to leverage development, and policies
 for the development of each station area. The City of Houston is developing an Urban Corridor
 Planning Ordinance, which will provide a planning framework for development in high capacity transit
 corridors and in specific station areas. METRO established a joint development/transit-oriented
 development (TOD) program that will initiate specific development projects.
- The City of Houston is not zoned. However, private deed restrictions are often used for both residential and commercial land development to ensure that standards for land use are maintained. While covenants will guide the development of future major projects in the North Corridor such as the Hardy/Near Northside reinvestment zone, most neighborhoods in the North Corridor currently lack such covenants. Existing neighborhood plans show some support for TOD, but do not identify implementation mechanisms aside from financing infrastructure improvements.

Performance and Impacts of Policies: Medium

(One-third of Land Use Rating)

- Local officials believe the existing Main Street LRT / Red Line, which opened in January 2004, has been a catalyst for residential and commercial development in the city's downtown and Midtown areas. However, aside from some scattered townhouse development there is no evidence to date of transitsupportive development in the North Corridor.
- The Hardy Rail Yards redevelopment site just north of downtown is proposed for a major transitsupportive, high-density, mixed-use development. Vacant and underutilized lots throughout the corridor provide additional development potential, if land use policies and market forces can be aligned.

¹ The revised weighting of the project justification criteria that took effect in July 2009 does not apply to this project. Per FTA's 2006 *Final Guidance on New Starts Policies and Procedures*, once a project has been approved into final design, the project is not subject to any changes in New Starts policy, guidance, and procedures. Thus, the two Economic Development factors are considered as part of the Land Use summary rating, as they were prior to July 2009, and Economic Development does not receive a separate rating.

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